

GARBUZOV, S.; GOL'TSEV, V.; SHUMILOV, N., red.; GINZBURG, A., tekhn.red.

[A Soviet man in space] Sovetskii chelovek v kosmose; spetsial'-  
nyi vypusk. Moskva, Izd-vo "Izvestiia," 1961. 126 p.

(MIRA 14:3)

(Astronautics) (Gagarin, IUrii Alekseevich, 1934- )

GOL'TSEV, V.; MAMLEYEV, D.; SHUMILOV, N., red.; VLASOVA, V., tekhn. red.

[Seven hundred thousand kilometers in outer space] 700 tysiach kilometrov v kosmose. Moskva, Izd-vo "Izvestiia," 1961. 188 p.

(MIRA 14:11)

(Astronautics) (Titov, German Stepanovich, 1935- )

MAMLEYEV, D.; SHUMILOV, N., red.; BEREZINA, A., tekhn. red.; GINZBURG, A.,  
tekhn. red.

[Two in outer space; a special issue] V kosmose -- dvoe; spetsial'-  
nyi vypusk. Moskva, Izd-vo "Izvestiia," 1962. 189 p.  
(MIRA 15:7)

1. Biblioteka "Izvestiy."  
(Astronauts)

MAMLEYEV, D.; SHUMILCV, N., red.

[Steps in space] Shagi v kosmose. Moskva, 1965.  
157 p. (MIRA 18:3)

SHUMILOV, N.; PATLAZHANOV

Traffic organization and safety. Avt. transp. 43 no.4:45-46  
Ap '65. (MIRA 18:5)

BRUMBY, N. S.

Stage formation of riegels in Eastern Europe and USSR. 17th Year.  
geog. ob. va 96 n. 4:321-328 17-18 17. (MIRA 17:10)

FRUMKIN, A.N.; KHRUSHCHEVA, Ye.I.; TARASEVICH, M.R.; SHUMILOVA, N.A.

Use of the rotating disk electrode with a ring in conjunction with the method of triangular voltage pulses for studying electrode reactions. *Elektrokhimiia* 1 no.1:17-19 Ja '65. (MIRA 18:5)

1. Institut elektrokhemii AN SSSR.

SHUMILOV, N.A.

Graphs showing the basic dynamics of mountain valley glaciation in  
Wurm. Izv. Vses. geog. ob-va 97 no.1:12-25 Ja-F '65.

(MIRA 12:3)

SHUMILOV, N.A.

Dynamics of the zero balance line in mountain glaciers during  
Wurm III. Izv. Vses. geog. ob-va 97 no.3:249-257 My-Je '65.  
(MIRA 18:8)

FUDOVKIN, M.I.; SKRYNNIKOV, R.G.; SHUMILOV, O.I.

Magnetic ionospheric perturbations in the aurora zone. Geomag. i aer.  
1 no. 6:1094-1100 N-D '64. (MIRA 18:1)

1. Pol'yarnyy geofizicheskiy institut Kol'skogo filiala AN SSSR.

CH

23

Effect of phosphoric acid on sizing and strength of paper. P. V. Shumilov. *Vsesoyuznyi Nauch.-Issledovatel. Inst. Bumashnoi Tsellyuloznoi Prom. Materialov* (Trans. All-Union Sci. Research Inst. Paper Cellulose Ind.) 1933, No. 2, 97-104.—Sols. of alum (produced from nephelite tailings and concentrates), contg. 0.4-2.2%  $P_2O_5$  to 1 kg. of fiber, showed no effect on sizing and the strength of paper. The effect of  $P_2O_5$  on the durability of paper is being investigated. C. B.

AS 6 51.4 METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES

Production of aluminum sulfate solutions from nephelitic products. P. V. Shumilov. *Tsentral. Nauch.-Issledovatel. Inst. Buzhskoi Prom. Materialov (Central Sci. Research Inst. Paper Ind. Trans.)* 1933, No. 3, 80-88. --Nephelitic concentrate and high-grade tailings, when treated with 1-3 N H<sub>2</sub>SO<sub>4</sub> in the cold, produced Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> solns. suitable for use in the production of paper. Treatment with SO<sub>2</sub> and H<sub>2</sub>O gave unsatisfactory results. Chas. Blanc

ASME S.A. METALLURGICAL LITERATURE CLASSIFICATION

GROUP

CLASSIFICATION

GROUP

CLASSIFICATION

11

13

Production of printing paper from waste paper. II.  
N. Moiseev and P. V. Shumilov. *Dumskaya Press*,  
12, No. 9, 48-51 (1933).—A general discussion. C. H.

AS - SLA METALLURGICAL LITERATURE CLASSIFICATION

ca 23

Printing paper of the reduced density of 35-40 g./sq. m.  
V. A. Grabovskii, P. V. Shumilov and M. Ye. Marabak.  
*Tekhnol. Nauch.-Issledovatel. Inst. Bumazhnol. Prom.*  
*Materialy* 1936, No. 2, 63-67. --A printing paper of  
40 g./sq. m., comparable in quality with the Soviet  
Union and foreign India and Bible paper, was obtained  
in the lab. by using 100% half-bleached sulfite pulp of  
50-65° hardness and 45° freeness by filling with 40%  
knoelin and heavily sizing. Chas. Blanc

ASH S L A METALLURGICAL LITERATURE CLASSIFICATION

Performance of the new types of hollandet beater  
 P. A. Shumilov and M. A. Moshchukhina. *Isvestiia  
 Vuzov - Tekhnicheskii Inst. Birmakh. Prom. Materialy* 1937,  
 No. 25, 110-26. The performance of Foyt, Mallik and  
 Banning hollanders of new construction was compared in  
 beating unbleached sulfite pulp to 18-20% freeness and  
 bleached sulfite pulp to 40-50% freeness for the production  
 of writing and printing paper No. 3 and Nos. 1 and 2,  
 resp. The best results were obtained in the Banning  
 beater at a min. pulp concn. of 7.5% and sp. drum pressure  
 of 5 kg./sq. m. for bleached pulp and 2.5 kg./sq. m. for  
 unbleached pulp. Chas. Blane.

1. SHUMILOV, P. V.
2. USSR (600)
4. Microchemistry
7. Course in qualitative chemical semimicroanalysis. V. N. Alekseyev.  
Reviewed by P. V. Shumilov. Zhur. prikl. khim. 26 No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953. Uncl.

Shumilov, P. V.

USSR:

✓ Quantitative determination of copper in paper. P. V.  
Shumilov and A. Ya. Kil'ter. *J. Appl. Chem. USSR*  
27, 95-96 (1954) (Engl. translation). See *C.A.* 48, 7299h.  
H. L. H.

SHUMILOV, P. V.

2730. Quantitative determination of copper in paper. P. V. Shumilov and A. Ya. Kul'mer (*J. Appl. Chem., USSR*, 1964, 87 (1), 100-111).—Quant. determination of Cu in paper is rendered difficult by the presence of Fe at concn. exceeding 3 to 5 times the concn. of Cu ( $\approx 0.005$  per cent.). In experiments with several masking agents, results are best by adding  $\text{NH}_4\text{F}$ , which forms colourless  $[\text{FeF}]^{2+}$  ions that do not react with I<sup>-</sup> in weak acid solutions. A detailed experimental procedure is described for the determination of Cu in paper ash by titrating I liberated by Cu with  $\text{Na}_2\text{S}_2\text{O}_3$  solution; max. error is  $\pm 1.3$  per cent. S. K. Lachowicz

SHUMILOV, P.V., kand.tekhn.nauk; KIL'TER, A.Ya., inzh.

Method for quantitative determination of manganese content in  
viscose cellulose. Trudy LTITSBP no.8:120-122 '61. (MIRA 16:9)  
(Woodpulp--Analysis) (Manganese--Analysis)

SHUMILOV, R. V.

Shumilov, R. V. - "Investigation of the conditions for application of cutting machines on steeply dipping strata," *Trudy DONUGI* (Donetskiy nauch.-issled. ugol'nyy in-t), symposium 4, 1948, p. 3-24

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

1. SHUTILOV, S.D.
2. USSR (600)
4. Altai Territory - Forage Plants
7. Introducing new forage crops on Altay collective farms, Sov.agron. 11 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Unclassified.

SHUMILOV, S.D.

Row crop system of agriculture in the Altai Territory. Biol. v  
shkole no.3:73-76 My-Je '62. (MIRA 15:7)

1. Altayskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.  
(Altai Territory--Agriculture)

S/056/63/044/004/015/044  
B102/B186

AUTHOR: Shumilov, S. N.

TITLE: Neutron transfer by the  $\text{Be}^9$  nucleus

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,  
no. 4, 1963, 1199 - 1203

TEXT: The production of  $\text{Be}^8$  nuclei in interactions of  $\text{Be}^9$  with photoemul-  
sion nuclei was studied with НИКФМ-А (NIKFI-D) nuclear emulsions of 300 -  
400  $\mu$  thickness. The plates were bombarded by  $\text{Be}^9$  ions accelerated to  
85 Mev by a linear accelerator. Among the 284 two-pronged stars of ( $\text{Be}^9$ ,  
 $\text{Be}^8$ ) reactions it was found that there were 146 in which  $\text{Be}^8$  was produced  
in the ground state and 138 with  $\text{Be}^8$  in excited states (3 and 11.5 Mev).  
The excitation energies  $Q$  were determined from the energies of the alphas  
produced in the decay of  $\text{Be}^8$  and the angle between their tracks:  $E_1 + E_2$   
 $- 2\sqrt{E_1 E_2} \cos \theta_{1,2} = 2Q$ . The angular distribution of the  $\text{Be}^8$  nuclei produced  
in the ground state has two sharp maxima at small angles, which indicates  
Card 1/2

Neutron transfer by the  $\text{Be}^9$  nucleus

S/056/63/044/004/015/044  
B102/B186

that there are two formation mechanisms. The peak at larger angles ( $\sim 25^\circ$ ) corresponds to tunnel transfer of a neutron, that at smaller angles ( $\sim 10^\circ$ ) to tangential interaction (Phys. Rev., 121, 192, 206, 1961) when the bombarding ion passes through the Coulomb barrier. The angular distribution of the  $\text{Be}^8$  nuclei produced in excited states has only one small-angle maximum which is mainly attributed to tangential interaction, perhaps with a smaller contribution of tunneling. The  $\text{Be}^8$  yield plotted as a function of the  $\text{Be}^9$  energy has a maximum at about 60 Mev. The drop after this energy can be explained by assuming that at higher energies the nuclei approach closer than the absorption radius and the probability of absorption of  $\text{Be}^9$  by Ag or Br rises rapidly. An estimate of the smallest absorption radius yields a value of  $1.95 \cdot 10^{-13}$  cm. All results obtained indicate that the main mechanism of  $\text{Be}^8$  formation is neutron transfer. There are 6 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR  
(Physicotechnical Institute of the Academy of Sciences  
Ukrainskaya SSR)

SUBMITTED: November 27, 1962  
Card. 2/2

SHUMILOV, S.N.; KLYUCHAREV, A.P.; RUTKEVICH, N.Ya.

Reactions yielding three  $\alpha$ -particles in  $B^{10}$  interaction  
with light nuclei. Zhur. eksp. i teor. fiz. 45 no.5:1356-  
1359 N '63. (MIRA 17:1)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

KLYUCHAREV, A.P.; PANYUK, Yu.N.; RUTKEVICH, N.Ya.; SHUMILOV, S.N.

"Concerning Reactions of Total Disintegration of Nuclei."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi,  
14-22 Feb 64.

I-9225-66 EWP(a)/EWP(m)/T/EWP(t)/EWP(h)/EWA(m)-2 LIP(c) 54  
 ACC NR: AP5026096 UR/0386/65/002/007/000 47

AUTHOR: Shumilov, S. N.; Klyucharev, A. P.; Rutkevich, N. Ya.  
 ORG: Physicotechnical Institute, Academy of Sciences UkrSSR (Fiziko-tekhnicheskiy  
 institut Akademii nauk UkrSSR)

TITLE: Pickup of a deuteron and an Alpha particle in the interaction between B10  
 and O18

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.  
 (Prilozheniye) v. 2, no. 5, 1965, 213-215

TOPIC TAGS: deuteron reaction, Alpha particle reaction, boron, oxygen, carbon, nuc-  
 leon interaction, nuclear emulsion

ABSTRACT: A rather large number of four-prong stars was observed in a study of the  
 interaction between B10 ions and emulsion nuclei, three of the prongs being tracks of  
 $\alpha$  particles and the fourth the track of a heavier particle. Type NIKFI-D nuclear  
 emulsions 400  $\mu$  thick were bombarded with B10 ions accelerated to 100 Mev in a linear  
 accelerator. The B10 ions entered the emulsion at an angle of 25° to the surface.  
 The emulsions made possible a reliable visual discrimination between tracks of singly-  
 charged and doubly-charged particles and of heavier nuclei. Since the initial ion  
 energy was known, it was possible to determine the energy at which the reaction took  
 place by measuring the range of the B10 ion. The visual selection and subsequent de-  
 tailed kinematic analysis, carried out with an "Ural-2" computer made it possible to

I. 9225-66

ACC NR: AP5026096

identify 252 stars due to the reaction  $O^{16} + B^{10} \rightarrow N^{14} + 3\alpha - 2.8$  Mev. Not a single case of this reaction was found when the energy of the bombarding ions was less than 25 Mev. The cross section at the maximum reached 111 mb. The angular distributions of the  $N^{14}$  nuclei produced in the reaction (Fig. 1), has two pronounced maxima in the region of small and large angles, reaching 20 and 14 mb/sr, respectively. The maximum in the small-angle region is due to a reaction mechanism in which an  $\alpha$ -particle complex is picked up from the  $O^{16}$  nucleus by the incident  $B^{10}$  ion. The maximum in the large-angle region is apparently due to a reaction mechanism in which the incident  $B^{10}$  ion picks up a deuteron complex from the  $O^{16}$  nucleus. The excitation energies of the  $C^{12}$  nuclei observed in these cases exceed 25 Mev as a rule, and reach 40—45 Mev. The  $C^{12}$  nucleus decays directly into three  $\alpha$  particles without interaction between them, or else via  $Be^8$  states with excitation energy larger than 20 Mev. Author thanks Ye. V. Cherkavskaya

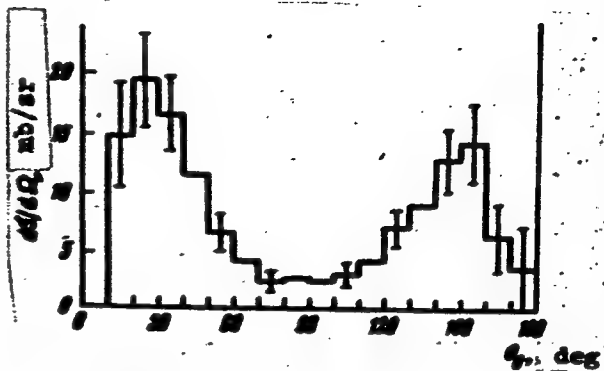


Fig. 1. Angular distribution of the nuclei  $N^{14}$  (in the c.m.s.), averaged over the bombarding ion energies from 25 to 95 Mev.

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L 9225-66  
ACC NR: AP5026096

V. M. Yemlyanova, K. P. Skibenko, Ye. K. Panteleyeva, and T. N. Startseva for great help in the processing of the emulsions. Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/  
18

SUBM DATE: 05Jul65/

ORIG REF: 000/

OTH REF: 000

Card 3/3

L 12024-66 EWT(m)/EWA(h)

ACC NR: AP5028001

SOURCE CODE: UR/0386/65/002/007/0347/0351

AUTHOR: Shumilov, S. N.; Klyucharev, A. P.; Rutkevich, N. Ya.

ORG: none

TITLE: Total nuclear decay reactions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v red-  
aktsiyu. (Prilozheniye), v. 2, no. 7, 1965, 347-351

TOPIC TAGS: Alpha decay, nitrogen, boron, nuclear reaction. Alpha particle  
reaction

ABSTRACT: This is a continuation of earlier measurements (ZhETF v. 45, 1356, 1963) of the cross sections of certain reactions with emission of  $\alpha$  particles due to  $B^{10}$  ions interacting with light nuclei in emulsion. In the present paper they report a more detailed investigation of the reaction  $N^{14} + B^{10} \rightarrow 6\alpha$ . Type NIKEI-D nuclear emulsions 400 " thick were bombarded with  $B^{10}$  ions accelerated to 100 Mev in the multiply-charged-ion linear accelerator of the Ukrainian Physicotechnical Institute. The emulsions made possible reliable visual discrimination of the tracks of singly-charged or doubly-charged

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L 12024-66

ACC NR: AP5028001

particles, and of heavier nuclei. From a total of approximately 10,000 stars produced by the interaction between the  $B^{10}$  ions and nuclei in the emulsion, they identified, as a result of visual selection, measurement of all the star parameters, and subsequent detailed kinematic analysis, a total of 22 six-pronged stars due to the reaction  $N^{14} + B^{10} \rightarrow 6\alpha + 0.4 \text{ Mev}$ , one seven-prong star due to the reaction  $N^{14} + B^{10} \rightarrow 5\alpha + 2d - 23.5 \text{ Mev}$ , and one seven-prong star due to the reaction  $O^{16} + B^{10} \rightarrow 6\alpha + d - 20.5 \text{ Mev}$ . The kinematic analysis of the stars and all the subsequent calculations were carried out with the "Ural-2" electronic computer. Not a single case of the first reaction was observed at bombarding-ion energy less than 55 Mev, whose cross section increases quite rapidly with increasing bombarding-ion energy, reaching 40 mb at 80 Mev. The only observed case of the second reaction occurred at 80 Mev bombarding-ion energy, and corresponds to a reaction cross section  $\sim 5 \text{ mb}$ . The energy distribution of the particles  $\alpha$  shows that there is a noticeable probability of observation of particles  $\alpha$  with much more than their equal to almost half the total kinetic energy, reaching 20--23 Mev in absolute magnitude. Authors thank V. N. Yemelyanova, K. P. Skibenko, Ye. V. Chernavskaya, Ye. K. Minakova, and T. N. Startseva.

Card 2/3

L 12024-66

ACC NR: AP5028001

for processing the emulsions. Orig. art. has: 3 figures and 3 formulas.

SUB CODE: 18,20/ SUBM DATE: 06Aug65/ ORIG REF: 003

jw

Card 3/3

... A. M. ...

... and alpha particle ... <sup>B<sup>10</sup></sup> ...  
... id ... 17 no. 421754-1762 ...

... (MIR 1981)  
... July 10, 1985.

DENYAKIN, Z.A.; BERMAN, M.A.; SHUMILOV, S.P.

Using jet-cutting mills in the weighting of circulating fluids.  
Neft. i gaz. prom. no.2:29-30 Ap-Je '65. (MIRA 18:6)

SHUMILOV, V.

A producers' cooperative needs help. Prom.koop. no.10:25 0 '56.  
(Svecha District--Brick industry) (MLRA 9:11)

SHUMILOV, V., champion SSSR po tekhnike pilotirovaniya samoleta  
Yak-18 na 1951 god.

For a high mastery. Kryl.rod. 3 no.5:8 My '52. (MLRA 8:8)  
(Airplane racing)

IGNAT'YEV, S.; SHUMILOV, V., sud'ya vsesoyuznoy kategorii, zasluzhennyy trener  
RSFSR

Above the wide Volga. Kryl. rod. 14 no.11:18-20 N '63.

(MIRA 16:11)

SHUMILOV, V. V.

USSR/Mining - Coal Mining Machinery

Card 1/1

Authors : Shumilov, V. V., and Latauzov, A. G.  
Title : Experiment on Use of a Cutting and Loading Machine, Type ShBM - 1.  
Periodical : Mekh. Trud. Rab. Ed. 3, 17 - 20, Apr - May 1954  
Abstract : The use and testing of a new cutting and loading machine, type ShBM - 1, in Donets coal mines. The tests indicate that the machine is highly efficient, and that 5191 m of shaft were sunk with its aid, in 1953. The author also describes its construction, and presents data on its performance. Tables; graphs; drawings.  
Institution : ....  
Submitted : ....

SHUMILOV, Vasil'y Vasil'yevich; KAPLUNOV, Ivan Zakharovich; TARASENKO, Viktor Ivanovich; LATAUZOV, Aleksandr Grigor'yevich; AFONINA, G., redaktor; VUYEK, M., tekhnicheskij redaktor

[Work of the ShBM-1 combine in mines of the Donets Basin] Rabota kombinov ShBM-1 na shakhtakh Dombassa. Kiev, Gos.izd-vo tekhn. lit-ry USSR, 1955. 90 p. (MLRA 9:3)

(Donets Basin--Coal mines and mining)

SHUMILOV, V.V. kandidat tekhnicheskikh nauk; TARASENKO, V.I.; GALKINA K.A.  
STARUSHENKO, A.S.; SHAPTALA, A.A.

Experience of dry dust catching in working with the ShBM-1 cutter-loader. Ugol' 30 no.5:46-47 My '55. (MIRA 8:6)

1. Mladshiy nauchnyy sotrudnik Donskogo nauchno-issledovatel'skogo ugol'nogo instituta (for Tarasenko) 2. Zaveduyushchaya laboratoriyey gigiyeni truda (for Galkina) 3. Mladshiy nauchnyy sotrudnik Instituta Fiziologii truda (for Starushenko) 4. Mladshiy nauchnyy sotrudnik Instituta Fiziologii truda (for Shaptala)  
(Donets Basin--Coal mining machinery) (Mine dust)

LYAPIN, D.P.; YATSKIKH, V.G.; KOMAROV, N.I.; SHUMILOV, V.V.

The over-all mechanization of cleaning and preparation work.

Mekh. trud. rab. 10 no.9:5-9 S '56.

(MLRA 9:10)

(Coal mines and mining)

SHUMILOV, V.V., kandidat tekhnicheskikh nauk [deceased]

~~SHUMILOV, V.V.~~  
New method of rock filling. Ugol' 32 no.3:17-23 Mr '57.  
(MLRA 10:5)

1. Donetskii ugol'nyy institut.  
(Donets Basin--Mine filling)

SOV-19-58-4-54/523

AUTHORS: ~~Shumilov, V.V.~~; Lyapin, D.P.; Yefremov, B.P. and Shumilova, Ye.V.

TITLE: A Method of Filling-In Mined Areas With Rock, and a Machine For This Purpose (Sposob zakladki porodoy vyrabotannogo prostranstva i mashina dlya osushchestvleniya sposoba)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 4, p 17 (USSR)

ABSTRACT: Class 5d, 14<sup>01</sup>. Nr 112422 (576011/718-54, 27 Sep 1954). Submitted to the USSR Ministry of the Coal Industry. For a safe filling-in of exploited mine areas, a cylindrical machine has been designed. In the center of the cylinder there is a piston-ram. One side of the cylinder contains the feed opening and the bunker. The machine is operated hydraulically.

Card 1/1

KESSENIKH, R.M.; SOTNIKOV, V.G.; TRIPPEL', V.G.; SHUMILOV, Yu.N.; POVELICHENKO,  
A.F. POZDEVA, Yu.G.

Effect of plasticization on the physical properties of polyvinyl  
chloride resin. Izv. TPI 126:36-45 '64. (MIRA 18:7)

SHUMILOV, Yu.S.

Long-period waves in the Kara Sea. Trudy AANII 210:277-283  
'61. (MIRA 14:11)

(Kara Sea--Waves)

CHERNYSHEV, N.I.; SHUMILOV, Yu.V.

Upper Permian sediments in the northern part of the Kama Valley  
and their correlation using diagrams of electric logging. Izv.  
vys. ucheb. zav.; geol. i razv. '7 no.5:34-43 My '64.

(MIRA 18:3)

1. Permskiy gosudarstvennyy universitet im. A.M. Gor'kogo.

SHUMILOVA, A. M.

"An Experimental Analysis of the Problem of the Prophylaxis of  
Opisthorchosis." Dr Med Sci, First Moscow Order of Lenin Medical Inst,  
20 Dec 54. (VM, 23 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

SHUMILOVA, AM

ARKHIPOV, A.S.; MASLOV, L.M.; PUL'KIS, S.A.; SOKOLOV, M.K.; SOKOLOV, N.P.;  
SUBBOTIN, F.H.; SHUMILOVA, A.M.

Professor K.M.Grechishchev; obituary. Gig. i san. 22 no.6:92-93  
Je '57. (MIRA 10:10)  
(GRECHISHCHEV, KSENOFONT MIKHAILOVICH, 1873-1957)

SHUMILOVA, Aleksandra Mikhaylovna

(Omsk State Med Inst) - Academic degree of Doctor of Medical Sciences, based on her defense, 20 December 1954, in the Council of the First Moscow Order of Lenin Med Inst, of her dissertation entitled: "Experimental Investigations of the Problem of Opisthorachosis Prophylaxis."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 1, 7 Jan 56, "yulleten' MVO SSSR, Uncl.  
JPRS/NY-548

SHUMILOVA, L. V.

11605

SHUMILOVA, L. V. Rastitel'nost' Tsentra<sup>1</sup>no sibirskogo ploskogor'ya.  
Trudy Vtorogo Vsesoyuz. geogr. s"yezda. T. Sh. II., 1949 s. 155-63.

SO: Leto is' Zhurnal'nykh Statey, No. 29, Moskva, 1949

USSR / General Biology. Evolution

B-7

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 361

Author : Shumilova, L.V.

Inst : Not Given

Title : Origin of Species in Plants According to Ch. Darwin and T.D. Lysenko.

Orig Pub : Uch. zap. Tomskogo un-ta, 1956, 27, 41-80

Abstract : No abstract

Card : 1/1

USSR / General Biology. Evolution

B-7

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 362

Author : Shumilova, L.V.

Inst : Tomsk University

Title : A Reply

Orig Pub : Uch. zap. Tomskogo un-ta, 1956, 27, 115-124

Abstract : The basic concepts of Darwin and Lysenko on problems of origin of species are compared, the ideas of Lysenko are critically analyzed and the theory of Darwin is defended. The concepts of Lysenko are criticized as to the intermittency of species origination, the unity of the organism and its life environments, the adequacy of adaptation of organisms to environments, the concept of "species," self-thinning, identification of natural and artificial selection. Darwin's indictments in denying species reality, gradualness and Malthusianism are rejected. It is demonstrated in the rejoinder that the teaching of Lysenko does not constitute creative Darwinism, and that it is afflicted by teleologism, since it denies Darwin's theory of natural selection and contradicts the principles of dialectics.

Card : 1/1

SHUMILOVA, L.V.

Zonal correlation of vegetation and its relation to phytogeographical divisions. Izv. Tomsk. otd. VBO 4:9-26 '59. (MIRA 14:6)

1. Kafedra botaniki Tomskogo Gosudarstvennogo universiteta imeni V. V. Kuybysheva.  
(Phytogeography)

SHUMILOVA, N.M.; TUDINA, O.P.

Use of *Illicium anisata* instead of *pimpinella anisum*.

Khar. prom. no.1:58-60 Ja-Mr '65.

(MIRA 15:4)

SHUMILOVA, M.N.

Improving the formula for domestic spices mixture in the salting  
of anchovies. Trudy Akademiya no. 21:51-36 '63.

(MIRA 17:8)

1ST AND 2ND ORDER										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDER									
<div style="position: absolute; top: 10px; left: 10px; font-size: 2em; font-family: cursive;">CA</div>										<p><b>Determination of copper in aluminum and magnesium alloys by the method of internal electrolysis.</b> N. I. Blok, N. A. Shumilova and N. P. Gorskaya. <i>Zarodskaya Lab. 10, 28-31 (1941).</i>—(1) <i>Al alloys of the Duralumin type.</i>—Dissolve 1 g. of the alloy in 30 ml. of 20% NaOH soln., carefully neutralize with 30 ml. <math>H_2SO_4</math> (1:5), add 100 ml. of 2 N <math>H_2SO_4</math>, 1-4 ml. of <math>HNO_3</math> (1:1), depending on Cu content, and heat completely to dissolve the ppt. Dil. the soln. with water to 250 ml., immerse a previously weighed Pt gauze (cathode) and an Al plate (anode), which are connected outside the vessel by a clamp. The Cu is sepd. quantitatively on the cathode at 60-70° in 2 hrs. After 2 hrs. remove the electrodes, wash with distd. water and disconnect. Wash the Pt gauze with alc., ether, dry with warm air and weigh. (2) <i>Silumin.</i>—Dissolve a 1-g. sample in 40 ml. of a stock mixt. of 150 ml. concd. <math>H_2SO_4</math>, 100 ml. of concd. <math>HNO_3</math>, 300 ml. concd. HCl and 450 ml. water. Evap. the soln. to fumes of <math>H_2SO_4</math>, add 100 ml. of 2 N <math>H_2SO_4</math>, heat to dissolve the sulfates, filter off <math>SiO_2</math>, reheat the filtrate to 60-65° in 2 hrs. (3) <i>Mg alloys.</i>—Dissolve the Cu at 60-65° in 2 hrs. (3) <i>Mg alloys.</i>—Dissolve 1 g. sample in 100 ml. 2 N <math>H_2SO_4</math> and 1 ml. 7.5 N <math>HNO_3</math>, dil. to 130-140 ml., heat to 60-65°, immerse the electrodes, and sep. the Cu in 90 min. In all cases the soln. after the detn. of Cu can be used to det. Fe in the usual manner. Small amts. of Fe which may appear in soln. during the dissolving of the Al anode have no effect on the results. The method is good for detg. up to 4.5% Cu in Al alloys. B. Z. Kamich</p>																			
																				<p>62</p>									
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>RESEARCH</p>																			
<p>GROUP</p>										<p>SECTION</p>																			

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCEDURES AND PROPERTIES INDEX										COMMON VARIABLES INDEX									
<p>Adsorption of oxygen on iron and the effect of adsorbed oxygen on the properties of iron electrodes. R. Burshel, N. Shumilova, and K. Golbert (Karpov Inst. of Phys. Chem., Moscow). J. Phys. Chem. (U.S.S.R.) 20, 789-801 (1946) (in Russian).—Fe band, Fe wire, or Fe powder prepd. by reduction with <math>H_2</math> of <math>Fe(NO_3)_3</math> or <math>Fe(CO)_5</math> was heated in <math>H_2</math> and degassed at 800-850°. When <math>O_2</math> in small amts. was admitted to this Fe at 20°, the rate of adsorption was high and const. (e.g., 0.12 cc./min.) until the adsorbed vol. reached the value <math>V</math>; after this the rate rapidly decreased. For smooth Fe <math>V</math> was, e.g., 0.023 cc. per 100 sq. cm. of the geometric surface area. For Fe powder <math>V = 0.045</math> cc. per g. One g. of this powder adsorbed 0.015 cc. of <math>N_2</math> in conditions corresponding to unimol. adsorption. If the adsorption of <math>O_2</math> was unimol., then the cross-section of <math>O_2</math> mol. was <math>5 \times 10^{-16}</math> sq. cm., the specific surface area of Fe powder was 0.5 sq. m., and the ratio of the real to geometrical area of smooth Fe was 2-3.5. <math>V</math> slightly increased from -183° to -138°, remained const. until -73°, and rapidly increased at higher temps. At 200° it was 2.4 cc. per g. of Fe. The electrochem. potential of an Fe electrode in alkali soln. was not affected by preceding adsorption of <math>2 \times 10^{14}</math> moles of <math>O_2</math> per sq. cm. of the actual surface, but adsorption of <math>4 \times 10^{14}</math> moles made Fe passive. To change the potential of Fe by anodic oxidation, <math>8 \times 10^{17}</math> moles/sq. cm. of <math>O_2</math> are required. During the anodic polarization both formation and soln. of oxide film take place. Pure, fully reduced Fe is not pyrophoric and readily sinters at 550-560°. Admixt. of O or S raises the sintering temp. and makes Fe pyrophoric. J. J. B.</p>										2									
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION										SYSTEM NUMBER									
1ST COLUMN										2ND COLUMN									
3RD COLUMN										4TH COLUMN									

SHUMILOVA, N.

Sep/Oct 46

USSR/Electricity  
Oxidation  
Electrodes

"Adsorption of Oxygen on Iron and Influence of Adsorbed Oxygen on the Behavior of an Iron Electrode," R. Bursteyn, N. Shumilova, K. Golbert, Karpov Inst Phys Chem, Moscow, 20 pp

"Acta Physicochimica URSS" Vol XXI, No 5

This paper has as its object quantitative study of influence of adsorbed oxygen on passivity of iron during its anodic oxidation. Adsorption is investigated at low pressures in temperature range 90-473° K. When oxygen is adsorbed to amount of  $2 \times 10^{15}$  molecules per sq cm, the electrochemical activity of iron electrode is retained, and upon adsorption of  $4 \times 10^{15}$  molecules per sq cm, complete passivation results. If oxide film were not removed by anodic polarization, amount of oxygen needed would probably be much less. Received, 15 Nov 1946.

PA 54T43

SHR-ILCVI, N. A.

PA 11/49T13

USSR/Chemistry - Iron, Passivity of  
Chemistry - Passivity, of Iron Jul 48

"Passivation of Iron With Gaseous Oxygen," N. A.  
Shumilov, R. Kh. Burshteyn, 4 pp

"Dok Ak Nauk SSSR" Vol LXI, No 3

Mechanism of anode passivation of iron in dilute  
solutions, after preliminary action on it by  
gaseous oxygen, was studied with allowances made  
for temperature of adsorption and anode oxidation.  
On basis of data obtained, a different mechanism  
of passivation of iron with gaseous oxygen is  
postulated, as compared to passivation upon anode

11/49T13

USSR/Chemistry - Iron, Passivity of (Contd) Jul 48

oxidation, possibly because oxygen adsorbed from  
gaseous phase differs in properties from that ad-  
sorbed in course of anode polarization. Submitted  
25 May 48.

11/49T13

USSR/Metals - Iron, Oxidation

11 Mar 52

"Interaction of Iron With Ozone," R. Kh. Burshteyn,  
N. A. Shumilova

"Dok Ak Nauk SSSR" Vol LXXXIII, No 2, pp 251, 252

Studies formation of oxide films on iron in presence of ozone, thickness of film being found by detg amt of hydrogen required for reduction of oxide film. Concludes that there is no significant difference in mechanism of protective film formation during reaction of iron with either ozone or oxygen. Oxide film formed in presence of ozone is thicker than that formed in presence of pure

214765

oxygen at 190°K, but is of same thickness in range of 290-430°K since, when temp is rising, decomposition rate of ozone is greater than rate of its reaction with iron. Submitted by Acad A. N. Trunkin 21 Jan 52.

SHUMILOVA, N. A.

214765

ACCESSION NR: AP4010035

S/0062/64/000/001/0017/0026

AUTHOR: Tarasevich, M. R.; Shumilova, N. A.; Burshteyn, R. Kh.

TITLE: Studies on oxygen adsorption and ionization by the method of triangular voltage impulses Report 1. Adsorption and desorption of oxygen at the silver electrode in anode and cathode polarization

SOURCE: AN SSSR. Izvestiya. Ser. khim., no. 1, 1964, 17-26

TOPIC TAGS: oxygen adsorption, oxygen desorption, oxygen silver electrode reaction, triangular voltage pulses, electrode reactions, electrode potential curves, ionization, oxygen bond changes, Ag sub 2 O, AgO, Ag sub 2 O sub 3, oxygen silver reaction kinetics

ABSTRACT: In the determination of short-lived products of electrode reactions, it has been found that triangular or saw-toothed voltage pulses placed on the electrode will obtain  $i-\varphi$  curves which differ essentially by their outline from galvanostatic charge curves. To study the kinetics of oxygen and hydrogen adsorption and desorption and formation and destruction of oxides at the silver electrode,

Card 1/3

ACCESSION NR: AP4010035

single and periodic triangular voltage pulses were used in a 1N KOH solution, in the range of 0.05-2.0 V and a rate of change of the potential of  $0.04 \div 300$  V/sec. The equipment is described (teflon-insulated silver electrodes, inert atmosphere, curves photographed after they became stationary). A 1 V/sec potential change and a 0.05-1.1 V potential range led to curves attaining a maximum of 0.32 V at the cathode and 0.36 V at the anode, corresponding to adsorption and desorption of hydrogen. Reducing this amplitude to 0.05-0.5 V apparently led to reduction of priorily adsorbed oxygen. Oxygen was adsorbed at the  $1.1 \div < 0.5$  V range; at a  $0.7 \div 0.8$  V potential range and a rate of 0.1 V/sec a maximum was observed corresponding to a change in the oxygen bond with the silver. The form of the  $i-\varphi$  curves at low speed rates of the applied potential was determined to a considerable degree by chemoaccumulation of oxygen whose bond energy with the surface was relatively high, while desorption and adsorption proceeded with considerable overvoltage. In fact, the  $i-\varphi$  curves at a speed of 1 V/sec and 0.1 V/sec had considerable hysteresis. With increase of the rate of change of the potential from

Card 2/3

ACCESSION NR: AP461035

10-100 V/sec the degree of filling of the silver surface with oxygen changed almost linearly with the potential in the range of its adsorption and desorption. The lesser the changes in the potential during electrode polarization with periodical pulses, the larger the number of places on the electrode surface freed from adsorbed oxygen during the cathode half-period. The formation and reduction of the oxides  $\text{Ag}_2\text{O}$ ,  $\text{NiO}$  and  $\text{Ag}_2\text{O}_3$  was determined by the same method. Formation of the phase oxide apparently follows accumulation on the electrode surface of a large amount of adsorbed oxygen. Upon retaining  $\varphi = 1.3$  V, this adsorbed oxygen will then pass into the crystalline oxide stage and this will lead to a quasi stopping of adsorption. "In conclusion, we wish to express our deep gratitude to A. N. Frumkin for his constant attention to this work." Orig. art. has: 8 figures and 4 tables.

ASSOCIATION: none

SUBMITTED: 14Jun63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: CH, PH

NO REF SOV: 012

OTHER: 007

Card 3/3

BURSHTEYN, R.Kh.; PSHENICHNIKOV, A.G.; SHUMILOVA, N.A.

Mechanism of the operation of diffusion electrodes. Dokl. AN  
SSSR 143 no.6:1409-1412 Ap '62. (MIRA 15:4)

1. Institut elektrokhemii AN SSSR. Predstavleno akademikom  
A.N.Frumkinym.

(Electrodes)

CH MELOVA, N. A.; TARASEVICH, M. R.; ZHUPAYEVA, G. V.

"Oxygen ionization on silver in alkaline solutions."

report presented at 15th Mtg, Intl Comm of Electrochemical, Thermodynamics and Kinetics, London, 21-26 Sep 64.

ALEKSEYEV, V.N.; KNOTS, L.L.; TARASEVICH, M.R.; SHUMILOVA, N.A. (Moscow)

Apparatus for investigating electrochemical systems by the  
triangular pulse method. Zhur. fiz. khim. 38 no.4:1048-1051  
Ap '64. (MIRA 17:6)

1. Akademiya nauk SSSR, Institut elektrokhemii.

FRUMKIN, A.N., akademik; SHUMILOVA, N.A., kand. khim. nauk;  
CHIZMADZHEV, Yu.A., kand. fiziko-matem. nauk

15th Conference of the International Committee of Electrochemical  
Thermodynamics and Kinetics held in London. Vest. AN SSSR 35 no.4:  
85 Ap '65. (MIRA 18:6)

24025

S/O19/61/000/011/027/054  
A154/A128

26 2513

AUTHORS: Burshteyn, R.Kh., Tarasevich, M.R., Pshegodskaya, N.A., and Shumilova, N.A.

TITLE: A method of activating the stabilized nickel metal-ceramic oxygen electrodes of a hydrogen-oxygen fuel element.

PERIODICAL: Byulleten' izobreteniy, no. 11, 1961, 33

TEXT: Class 21b, 1401. No. 138652 (686715/24 of November 23, 1960). A method of activating the stabilized nickel metal-ceramic oxygen electrodes of a hydrogen-oxygen fuel element by introducing a metal catalyst into them, distinguished by the fact that, in order to guarantee high electrochemical activity at atmospheric pressure and low temperature (of the order of 90°C), silver is used for the catalyst.

X

Card 1/1

KHRUSHCHEVA, Ye.I.; SHUMILOVA, N.A.; TARASEVICH, M.R.

Study of the process of molecular oxygen ionization on platinum by the method of superimposition of triangular voltage pulses on a disk electrode with a ring. Elektrokimiia 1 no.6:730-734 Je '65. (MIRA 18:7)

1. Institut elektrokhimii AN SSSR.

TRUTAYEVA, G.V.; SHUMILOVA, N.A.; TAPASEVICH, M.R.

Ionization of oxygen on silver. Dokl. AN SSSR 161 no.1:151-153  
Mr '65. (MIRA 18:3)

1. Institut elektrokhemii AN SSSR. Submitted August 10, 1964.

1. The first part of the document is a letter from the

Director of the Central Intelligence Agency to the

President of the United States, dated 10/10/60. The letter

FRUMKIN, A.N.; SHUMILOVA, N.A.; KABANOV, B.N.; LEVINA, S.D.

Revekka Khaimovna Burshtein; on her sixtieth birthday. Zhur.  
fiz. khim. 38 no.5:1390-1391 My '64.

(MIRA 18:12)

TARATEVICH, F.R.; SHURELOVA, N.A.; BUSHTEYN, R.Kh.

Study of the adsorption and ionization of oxygen by the method of triangular voltage pulse. Report No.2: Ionization of molecular oxygen on silver in alkaline solution. Izv.AN SSSR, Ser.khim. no.1:32-37 '66. (MIRA 19:1)

1. Institut elektrokhimii AN SSSR. Submitted August 16, 1963.

SHUMILOVA, N.A.; ZHUTAYEVA, G.V.; TARASEVICH, M.R.; BURSHTEYN, R.Kh.

Oxygen adsorption on platinum studied by the method of triangular  
voltage pulse. Zhur. fiz. khim. 39 no.4:1012-1016 Ap '65.  
(MIRA 19:1)

1. Institut elektrokhemii AN SSSR. Submitted June 19, 1964.

ALEXSEYEV, V.N.; ZHUTAYEVA, G.V.; KNOTS, I.L.; LENTSEER, B.I.; TARASEVICH,  
M.P.; SHUMILOVA, N.A.

Method of trapezoidal voltage pulses. Elektrokhimiya 1  
no.3:373-376 Mr '65. (MIRA 18:12)

1. Institut elektrokhemii AN SSSR.

L 22244-66 EWT(m)/ETC(f)/EWG(m)/T/EWP(t) IJP(c) DS/JD

ACCESSION NR: AP6005751 (A) SOURCE CODE: UR/0074/65/034/010/1697/1720

AUTHOR: Bagotskiy, V. S.; Nekrasov, L. N.; Shumilova, N. A.

ORG: Institute of Electrochemistry, AN SSSR (Institut elektrokhimii AN SSSR);  
MGU im. M. V. Lomonosov

TITLE: Electrochemical reduction of oxygen

SOURCE: Uspekhi khimii, v. 34, no. 10, 1965, 1697-1720

TOPIC TAGS: oxygen reduction reaction, chemical reduction, electrode, electrochemistry

ABSTRACT: This review examines the results obtained for metal electrodes in the experimental reduction of oxygen. The oxygen electroreduction process is among the more complicated electrochemical reactions, the mechanism of which may be established only as a result of an entire series of varied experiments. This review testifies to the successes in the study of this reaction, mostly due to the development and application of new experimental research methods. A large share of the work, the results of which are presented in this paper, was performed at the Department of Electrochemistry, Moscow State University im. M. V. Lomonosov (Kafedra elektrokhimii Moskovskogo gosudarstvennogo universiteta) and at the

Card 1/2

UDC: 541.138.3:546

L 22244-66

ACCESSION NR: AP6005751

Institute of Electrochemistry, Academy of Sciences SSSR (Institut elektrokhemii Akademii nauk SSSR) under the supervision of A. N. Frumkin, who has advanced several concepts which are now fundamental in research on the electroreduction of oxygen. In spite of the existing achievements, the problem of cathode reduction of oxygen is not exhausted, there are still many unresolved questions. Still unclear, for example, are such questions as the mechanism of the heterogeneous process of the catalytic decomposition of hydrogen peroxide; there is not enough information on the nature of the energy distribution on the surface of solid electrodes, on the nature and forms of adsorbed oxygen with various potentials of the electrode, etc. However, taking into consideration the rapid development of the theory of electrochemical kinetics and the progress in the field of experimental technology, there is firm confidence that many questions unclear at the present time will be resolved soon. Orig. art. has: 15 figures and 28 formulas.

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 057 / OTH REF: 028

Card 2/2    nst

L 36923-66 EWT(m)/T DS

ACC NR: AP6008499

(A)

SOURCE CODE: UR/0062/66/000/001/0032/0037

AUTHOR: Tarasevich, M. R.; Shumilova, N. A.; Burshteyn, R. Kh.

ORG: Institute of Electrochemistry, Academy of Sciences, SSSR (Institut elektrokhimii Akademii nauk SSSR)

TITLE: Investigation of adsorption and ionization of oxygen by the triangular voltage pulse method. Communication 2. Ionization of molecular oxygen on silver in an alkaline solution

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1966, 32-37

TOPIC TAGS: oxygen, gas ionization, gas adsorption, electrolytic deposition, silver

ABSTRACT: In this investigation the authors study the ionization of molecular oxygen on a silver electrode in an alkaline solution. The anode and cathode branches of the polarization curves are measured by applying single or periodic triangular voltage pulses to a rotating silver electrode. A 8.2-mm-diameter electrode is used when the rates of change of the potential are up to 1 V/sec and 0.6 mm when the rate of increment of the potential is above 10 V/sec. The experiments are carried out in 1 N KOH at 25% and an oxygen pressure of 1 atm. The electrolytic oxygen used is subjected to additional purification by passage through activated

Card 1/2

UDC: 541.183+541.13

Card 2/2

L 38168-66 EWT(m)/T IJP(c) DS

ACC NR: AP6019241

(A)

SOURCE CODE: UR/0364/66/002/003/0363/0367

23  
14  
B

AUTHOR: Nekrasov, L. N.; Khrushcheva, Ye. I.; Shumilova, N. A.; Tarasevich, M. R.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet); Institute of Electrochemistry, Academy of Sciences, SSSR, Moscow (Institut elektrokhimii Akademii nauk SSSR)

TITLE: A study of the electrochemical reduction of oxygen on a rhodium electrode in alkaline solutions

SOURCE: Elektrokhiimiya, v. 2, no. 3, 1966, 363-367

TOPIC TAGS: electrochemical analysis, chemical reduction, hydrogen peroxide, alkaline cell, ~~polarization~~, rhodium, electrode, ionization, oxygen, cathode polarization

ABSTRACT: Ionization of oxygen was studied on rotating disc electrodes of rhodium (99.7% Rh). The discs had a 1.48 mm radius and were mounted in sets of four on a platinized wheel having an outer radius of 2.88 mm and an inner radius of 1.76 mm. Polarization curves were obtained in 0.1 N KOH solutions with the wheel rotating at 500, 1680 and 4020 rpm. On the cathode side, the current rose gradually with potential  $\varphi$  until the oxygen was liberated at which point the slope decreased. With increases in rotation speed, the heights and slopes of the curves increased. The current on the wheel and the  $\%H_2O_2$  yield are given as a function of disc potential for 500 and 1680 rpm. For increases in cathodic polarization of the discs, the current on the wheel

Card 1/2

UDC: 341.138.3:546.21

L 38168-06

ACC NR: AP6019241

rose, reached a maximum and finally decreased; the  $\%H_2O_2$  fell linearly throughout the entire potential range of 0.8-0 v. Comparison with prior experiments on Pt and Pd electrodes showed that a two-stage process was involved. In Rh, a retardation process replaced ionization at  $\phi = 0.4-0.1$  v. Kinetic constants for the reduction of  $H_2O_2$  were compared to those for the total 4-electrode process ( $K_{O_2}$ ) at constant values of  $\phi$ . Between  $\phi = 0.1-0.4$  v they compared well, but above 0.4 v  $K_{O_2}$  they were calculated from  $1/K_{O_2} = 1/K_1 + 1/K_2$  where  $K_1$  and  $K_2$  = constants for the first and second stages of the total process. The constants increased in magnitude with the speed of rotation but the cause of this was unexplained. Other polarization curves were obtained to study the influence of the electrode surface condition - either reduced, activated in the reverse direction or oxidized. In all potential ranges the current was least in the oxidized electrode due to the increased quantity of  $H_2O_2$  fixed on the wheel. In conclusion the authors expressed their deep gratitude to Academician A. N. Frumkin for assistance in discussing the results. Orig. art. has: 4 figures, 2 tables, 1 formula.

SUB CODE: 07/ SUBM DATE: 17Jun65/ ORIG REF: 005/ OTH REF: 000

Card 212/MLP

SHUMILOVA, N.V. (Moskva)

Disorders of the higher nervous activity in congenital eunuchodism.  
Probl.endok. i gorm. 1 no.1:97-105 Ja-F '55 (MLRA 8:10)

1. Iz kliniki Vsesoyuznogo instituta eksperimental'noy endokri-  
nologii (dir.--prof. Ye.A.Vasyukova)

(CENTRAL NERVOUS SYSTEM, in various diseases,  
eunuchodism, congen., higher nervous funct)

(EUNUCHODISM,  
congen., higher nervous funct. in)

BELKIN, A. I., STUMILOVA, N. V.

"The Mental Problem of Patients with Congenital Eunuchoidism."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959  
(All-Union Institute of Experimental Endocrinology)

From the State Scientific Research Institute of Pediatrics (Director--Professor V. M. Baishchikov) of the Ministry of Health RSFSR and the All-Union Institute of Experimental Endocrinology of the Ministry of Health SSSR (Director--Professor YE. A. Vasyukova)

SHUMILOVA, N.V.; BALABOLKIN, M.I.

Xanthomatosis with disorders of cerebral blood circulation in a patient with acromegaly. Probl. endok. i gorm. 10 no.6:56-58 N-D '64. (MIRA 18:7)

1. Tarapevticheskoye otdeleniye kliniki Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof. Ye.A.Vasyukova), Moskva.

SHUMILOVA, N.V.; BALABOLKIN, M.I.; ZAYRAT'YANTS, V.B.

Itsenko-Cushing disease in conjunction with cancer of the  
pancreas. Probl. endok. i gorm. 11 no.1:60-62 Ja-F '65.  
(MIRA 18:5)

1. Terapevticheskoye otdeleniye (zav. - kand. med. nauk A.G.  
Vasil'yeva) i patologoanatomicheskoye otdeleniye (zav. -  
kand. med. nauk V.B. Zayrat'yants) Vsesoyuznogo nauchno-  
issledovatel'skogo instituta eksperimental'noy endokrinologii  
(dir. - prof. Ye.A. Vasyukova), Moskva.

BOCHVALI, I. A.; SHARAF, G. R.

Study of conditions of distilling zinc from polymetallic concentrates applicable to oxygen-blown smelting in atomized state. TSvet. met. 38 no.2:32 P '65.

(MIRA 18:3)

SHUMILOVA, R.G.

PHASE I BOOK EXPLOITATION SOV/5303

Nauchno-tekhnicheskoye soveshchaniye po dempfirovaniyu kolebaniy. Kiyev, 1958.

Trudy Nauchno-tekhnicheskogo soveshchaniya po dempfirovaniyu kolebaniy, 17 - 19 dekabrya 1958 g. (Transactions of the Scientific and Technical Conference on the Damping of Vibrations, Held 17 - 19 December, 1958) Kiyev, Izd-vo AN UkrSSR, 1960. 178 p. 2,000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Editorial Board: I. N. Prutsverich, G. S. Piaronko (Resp. Ed.), G. V. Samonov, V. V. Grigor'yeva, and A. P. Yakovlev; Ed. of Publishing House: I. V. Kisina; Tech. Ed.: A. A. Matveychuk.

COVERAGES: The book contains 27 articles dealing with principal results of theoretical and experimental investigations of energy dissipation in mechanical vibrations carried out in the Soviet Union from 1956 to 1958. Problems of energy dissipation in materials and factors affecting it are discussed. Particularly new methods of experimental investigation of damping of vibrations are presented. Attention is given to the recently developed nonlinear theory of calculating vibrations in elastic systems, taking energy dissipation into account. Attempts to analyze internal energy dissipation in materials using methods of mathematical statistics are discussed. Some articles deal with engineering problems in dynamics, in which damping is claimed to play a highly substantial part. Aspirant N. I. Mukhin, of the Kiyev Polytechnic Institute, is mentioned. References accompany some of the articles.

SOV/5303

Timoshenko, V. G., [Candidate of Technical Sciences]. On Some Experimental Methods for Studying Energy Dissipation in Vibrating Material	84
Mitskevich, Z. A., A New Method for Determining Characteristics of Internal Friction	93
Kuz'menko, V. A., [Junior Scientific Worker]. Calorimetric Study Method for Energy Dissipation in a Material Subjected to High-Frequency Mechanical Vibrations	97
Khil'chevskiy, V. V., [Candidate of Technical Sciences]. On the Determination of the Logarithmic Decrement of Freely Damped Vibrations	99
Kuz'menko, V. A., On the Determination of True Characteristics of Energy Dissipation in a Vibrating Material	103
Novikov, M. V., [Candidate of Technical Sciences]. Effect of the Type of State of Stress on Energy Dissipation in a Vibrating Material	107
Khil'chevskiy, V. V., On the Effect of the Type of State of Stress on Energy Dissipation in a Material	115
Yakovlev, A. P., [Candidate of Technical Sciences]. On Energy Dissipation in Rods Subjected to Bending Vibrations of Different Types	118
Mukhin, N. M., On the Effect of Geometric Dimensions of Specimens on Energy Dissipation in a Material Vibrating Torsionally	123
Yakovlev, A. P., and R. G. Shumilova [Senior Engineer, Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences UkrSSR)]. Study of the Effect of the Dimensions of Ceramic Specimens on Logarithmic Decrement of Damping Transversal Vibrations	127

Card-5/1

5

PHASE I BOOK EXPLOITATION

SOV/6342

Pisarenko, Georgiy Stepanovich, Valeriy Trofimovich Troshchenko, Vsevolod Georgiyevich Timoshenko, Vasiliy Aleksandrovich Kuzmenko, Georgiy Vakh tangovich Isakhanov, Georgiy Nikolayevich Tret'yachenko, Boris Alekseyevich Gryaznov, Nikolay Vasil'yevich Novikov, Vasiliy Nikitich Rudenko, and Rufina Gerasimovna Shumilova

Prochnost' metallokeramicheskikh materialov i splavov pri normal'nykh i vysokikh temperaturakh (Strength of Sintered Materials and Alloys at Room and High Temperatures) Kiev, Izd-vo Akademii nauk UkrSSR, 1962. 274 p. Errata slip inserted. 2400 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Resp. Ed.: G. S. Pisarenko, Corresponding Member, Academy of Sciences USSR; Ed.: I. V. Lebedev; Tech. Ed.: Yu. B. Dakhno.

Card 1/82

Strength of Sintered Materials (Cont.)

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**PURPOSE:** The book is intended for engineers, scientific research workers, aspirants, and students concerned with problems of the strength of sintered materials and structural parts.

**COVERAGE:** The book reviews the results of studying the strength, ductility, and elasticity of materials and structural parts produced by powder-metallurgy methods and presents brief information on these methods. Particular attention is given to methods of experimental investigation of physical and mechanical characteristics of heat-resistant sintered materials with specific properties, and to the description of a number of testing units developed for these investigations. Some problems of the theory of the strength of brittle sintered materials and high-porosity ductile materials are discussed. Laws governing changes in characteristics of strength and elasticity under the effect of various factors are outlined. The appendix includes reference tables with data on the basic mechanical characteristics of a number of sintered materials. The assistance of members of the Powder Metallurgy Institute V. I. Kovpak, Yu. A. Kashtalyan, L. V. Kravchuk, A. P. Yakovlev, V. K. Kharchenko, V. K. Kuz'menko, and V. A. Chabotarev is acknowledged. There are 141 references, mostly Soviet.

Card 2/92

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Sensitivity to DDT of houseflies in various climatic zones of the USSR. Zhur.mikrobiol., epid.i immun. 33 no.8:20-24 Ag '62.  
(MIRA 15:10)

1. Iz TSentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo instituta.

(FLIES—EXTERMINATION) (DDT)

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Sensitivity of houseflies to chlorophos prior to its use.  
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SHUMILOV, V. (pos.Svecha, Kirovskaya obl.); BURAVLEV, V.; FOMIN, A., mekhanik;  
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1. Nachal'nik mebel'nogo tsekha Pestovskogo rayonnogo  
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(MIRA 14:1)

(GLAUCOMA) (PHOSPHORIC ACID)  
(AUTONOMIC DRUGS)

SHUMILOVA, V.I.

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Sov. med. 25 no.2:147-150 F '62. (MIRA 15:3)

1. Iz kafedry glaznykh bolezney (zav. - prof. E.E. Andrezen)  
i kafedry fakul'tetskoy terapii (zav. - prof. T.S. Istamanova)  
I Leningradskogo meditsinskogo instituta imeni akademika Pavlova.  
(HYPERTENSION)  
(BLIND SPOT)

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SOURCE CODE: UR/0246/65/065/006/0924/0927

AUTHOR: Shumilova, V.K.

ORG: Department of Psychiatry/headed by Candidate of medical sciences Ts. P. Korolenko/, Novosibirsk Medical Institute/scientific work director--Professor M.A. Gol'denberg (deceased)/(Kafedra psikiatrii Novosibirskogo meditsinskogo instituta)

TITLE: Mental disorders arising from tofranil therapy

SOURCE: Zhurnal nevropatologii i psikiatrii, v. 65, no. 6, 1965, 924-927

TOPIC TAGS: psychoneurotic disorder, therapeutics, man, drug effect  
ABSTRACT: Of 500 patients with depressive states of varying origin, 105 treated with tofranil (melipramine) developed secondary mental disorders in the form of brief manic states, hallucinations, psychosensory disturbances, delirium, epileptiform syndromes, and somewhat unpleasant dreams (but not nightmares). The mental disorders were associated with such autonomic symptoms as mouth dryness, convulsive twitching of individual muscle groups, tremor, mydriasis, urinary retention, paresis of accommodation, increased appetite, and itching.

The disorders, usually arose after the administration of relatively large doses of the antidepressant (300-450 mg daily) or after the prolonged administration of smaller doses. The transiency and reversibility of the symptoms without special therapy (solely by suspending the drug or reducing the dosage) suggest that the disorders were neurodynamic in origin.

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UDC: 616.893-02: 615.76

SHUMILOVA, V. K., vrach

Dynamics of the morphological structure of the blood in acrichine  
"psychosis" in animals. Trudy Novosib. gos. med. inst. 37:199-202  
'61. (MIRA 15:6)

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[Nature of Chelyabinsk Province] Priroda Cheliabinskoi oblasti. Cheliabinsk, Iuzhno-Ural'skoe knizhnoe izd-vo, 1964. 241 p. (MIRA 18:7)

1. Kafedra geografii Chelyabinskogo pedagogicheskogo instituta (for Dubovik, Mamin, Rumyantseva, Kirin). 2. Nachal'nik geologicheskogo otdela Chelyabinskogo geologorazvedochnogo tresta (for Otto). 3. Chelyabinskaya gidrologicheskayastantsiya (for Seregin). 4. Nachal'nik pochvennoy partii Chelyabinskoy zemleustroitel'noy ekspeditsii (for Moskaev). 5. Institut biologii Ural'skogo filiala AN SSSR (for Kolesnikov). 6. Kafedra zoologii Chelyabinskogo pedagogicheskogo instituta (for Okorokov, Starikova, Shumilova). 7. Chelyabinskii rybnyyrest (for Klimenko).

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